

Prospective teachers' skills of activity based lesson planning given by mathematical curriculum of the National College of Education

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Prospective teachers acquired skills of activity based lesson planning through their curriculum of mathematics during the first two years of NCoE. These skills may result for their teaching practice in internship period. The education reforms introduced in 2007 the 5E learning cycle emphasized the importance of activity based teaching. The main purpose of this study was to examine the implementation of activities for achieving the mathematical concepts in internship period. This study consisted of two phases. In the first phase data, which were perceptions of prospective teachers on the activity based teaching, were collected using questionnaire administered to 280 Sinhala medium prospective teachers, from three main NCoE which conducted mathematics courses. It was revealed that 35% of the sample was in the view that the guidance provided individually to prepare activities was not enough. However 53.8% of the prospective teachers were in the view that they were aware of activity based teaching methods through mathematical curriculum and 34.4 % of the sample agreed that given instructions were enough to build up activities creatively. While 45% showed that they are directed to make activities by using various learning sources and library materials. It was revealed from the responses to the questionnaire, the prospective teachers were in the view that they do not get sufficient skills of planning and creating activities by curriculum of mathematics of NCoE. In the second phase of this study, twenty four prospective teachers out of the above number were selected for lesson observation under Gerges (2001) sampling method. Informal interviews and participant observation were used as the method of data collection and transcripts were prepared using field notes and audio records. Data were analyzed qualitatively and quantitatively. It was revealed that 66.4% prospective teachers implemented activities in exploration stage of their lessons. Out of the above the number 42% of activities resulted to develop misconcepts. All of those activities carry out under group work method. In this learning approach, most of the students did not actively participate in the given activities. In depth of analysis it was able to identify three types of activities. They were named as constructive, exploratory and non-exploratory. Non exploratory activities were not given opportunities to develop reasoning skills. According to the conclusions arrived from the study, some suggestions were made to reform curriculum of mathematics to improve the skills of activity based lesson planning of the prospective teachers of the National Colleges of Education.